

## OFFSET CONTROL FOR ASSEMBLING AN ELECTRONIC DEVICE HOUSING

### CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] This application is a continuation patent application of U.S. patent application Ser. No. 15/466,739, filed Mar. 22, 2017 and titled “Offset Control for Assembling an Electronic Device Housing,” which is a continuation patent application of U.S. patent application Ser. No. 13/967,636, filed Aug. 15, 2013 and titled “Offset Control for Assembling an Electronic Device Housing,” now U.S. Pat. No. 9,606,579, which is a divisional patent application of U.S. patent application Ser. No. 12/794,563, filed Jun. 4, 2010 and titled “Offset Control for Assembling an Electronic Device Housing,” now U.S. Pat. No. 8,551,283, which is a nonprovisional patent application of and claims the benefit of U.S. Provisional Patent Application No. 61/325,801, filed Apr. 19, 2010 and titled “Housings for Electronic Devices and Methods Therefor,” and is a nonprovisional patent application of and claims the benefit of U.S. Provisional Patent Application No. 61/300,780, filed Feb. 2, 2010 and titled “Handheld Device Enclosure,” the disclosures of which are hereby incorporated herein by reference in their entireties.

### BACKGROUND

[0002] Portable electronic devices can be constructed using a variety of different approaches. For example, a “bucket” type approach can be used in which a first housing component serves as a bucket into which electronic device components are placed, and a second housing component serves as a cover for the bucket. This arrangement secures the electronic device components between the first and second housing components. As a variation of this, some or all of the electronic device components can be assembled into the cover for the bucket, and the cover can subsequently be rotated into the bucket to close the device.

[0003] Other known portable electronic devices can be constructed by inserting components into a hollow housing element. For example, an electronic device can be constructed using a tubular structure (e.g., a flattened tube or a hollow rectangular tube) into which electronic device components can be inserted. The electronic device components can be inserted into the tubular structure from one or both ends, and connected within the structure. For example, one or more circuits inserted from opposite ends of the tubular structure can be connected through an opening for a window in the structure. The structure can be capped at one or both ends to ensure that the components remain fixed within the tubular structure, and to provide interface components (e.g., connectors, buttons, or ports) for the device.

[0004] Unfortunately, however, as portable electronic device continue to be made smaller, thinner and/or more powerful, there remains a continuing need to provide improved techniques and structures for providing housings for portable electronic devices.

### SUMMARY

[0005] Embodiments are described herein in the context of housings for electronic devices. According to one aspect, adjoining surfaces of electronic device housings can be mounted or arranged such that adjoining surfaces are flush

to a high degree of precision. The electronic devices can be portable and in some cases handheld.

[0006] The invention pertains to apparatus, systems and methods for assembling electronic devices, namely, portable or handheld electronic devices.

[0007] The invention may be implemented in numerous ways, including, but not limited to, as a method, system, device, or apparatus. Several embodiments of the invention are discussed below.

[0008] As a method for assembling a device housing of an electronic device, one embodiment can, for example, provide an outer glass member for the device housing, and provide a protective side structural member having a receptive plane that is to receive the outer glass member. A liquid adhesive can be applied to a portion of the outer glass member and/or a portion of the protective side structural member. The outer glass member can be positioned adjacent to the receptive plane of the protective side structural member. A first force can be applied to push the outer glass member against a planar reference surface, and a second force can be applied to push the protective side structural member against the planar reference surface. The second force is independently applied from the first force. Still further, the liquid adhesive can be cured into a solid bonding material that bonds together the outer glass member and the protective side structural member, thereby assembling the outer glass member with the protective side structural member. Subsequently, the first force and the second force can be removed.

[0009] As a method for assembling a device housing of an electronic device, one embodiment can, for example, provide an outer housing member for the device housing, and provide a protective side structural member. A first force can then be applied to push the outer housing member against a planar reference surface, and a second force can be applied to push the protective side structural member against the planar reference surface. The second force is independently applied from the first force. The outer housing member and the protective side structural member can then be secured together, thereby assembling a portion of the device housing including at least the outer housing member with the protective side structural member. The assembled portion of the device housing can then be removed from the planar reference surface.

[0010] As an electronic device enclosure, one embodiment can, for example, include at least an outer periphery member defining a side surface for the electronic device enclosure, and an internal structure secured to an inner surface of the outer periphery member. The internal structure can be offset from front and back planar boundaries of the outer periphery member. The electronic device enclosure can further include a front cover assembly placed and secured adjacent the front planar boundary of the outer peripheral boundary, thereby providing a front surface for the electronic device enclosure. The front cover assembly can include a front cover member and a protective side member, the protective side member being provided against and around the sides of the front cover member.

[0011] According to one aspect of the present invention, an apparatus includes a cover part that includes at least one attachment protruding therefrom. The apparatus also includes a housing part and at least one electronic component. The housing part includes at least one receptacle configured to receive the attachment. The receptacle is